Charge for the Director's CD-2/3a Review of BTeV Project September 28-30, 2004

This charge is for the Committee to conduct a Director's Critical Decision – 2/3a (CD-2/3a) Review of the proposed BTeV project at Fermilab. Approval of CD-2 establishes the baseline budget for construction and will allow the expenditure of funds for detailed design. With CD-3a we're requesting the approval of "Limited Construction" using FY05 MIE (Major Item of Equipment) funds including initiation of several long lead procurements.

Approval of CD-2 by DOE officials is based on a *Preliminary Design* for the project, a *cost and schedule baseline*, and several additional project management documents. The technical part of the review will focus on the Technical Design Reports for the Detector and IR and a draft Title I Design for the C0 Outfitting. *The cost and schedule baselines are to be based on a detailed WBS – Work Breakdown Structure, WBS Dictionary, BOE – Basis of Estimate documentation, risk and contingency analyses, RLS – Resource Loaded Schedule, and time phased funding and cost profiles. The committee is asked to review each of these items, for quality, completeness, and accuracy. Furthermore, the committee is asked to review and assess the quality of and comment on the additional formal project management documentation required for CD-2 approval. Also, please evaluate BTeV responses to recommendations from the March 30-April 1, 2004 CD-1 Director's Review, the May 27, 2004 Mini-Review of the Schedule, the August 10-11, 2004 Director's Performance Management System Review, the April 27-29, 2004 DOE CD-1 Review, and the June 22, 2004 DOE Letter Report on the Review of the Review of the Revised BTeV Schedule.*

Approval of CD-3 is based primarily on Final Design and procurement packages. Therefore for our CD-3a approval request, please review the half dozen or so early FY05 long lead procurement items for maturity of design and procurement documentation. For other procurement and production activities that are scheduled for FY05 please review the design maturity. Please review especially closely the planned FY05 MIE activities from the point of view of their being essential for achieving the Staged Detector completion schedule.

A Lehman Review corresponding to a DOE CD-2/3a Review is scheduled for October 26-28, 2004. Therefore, a key purpose of this review is to *assess the readiness of the BTeV Project for a Lehman CD-2/3a Review*. Please answer the questions posed in the charge for the Lehman review. Constructive comments on presentation content, format, and style are requested.

Fermilab and BTeV are planning for CD-2/3a approval and beginning limited construction in early to mid FY2005.

Finally, the committee should present findings, comments, and conclusions at a closeout meeting with BTeV and Fermilab management and provide a written report soon after the review.